

Amendments to the Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently Amended) A blood pump comprising:

a housing including a combination of permanent magnets and electromagnets positioned forming an electromagnetic bearing;

an impeller disposed within said housing, said impeller being magnetically suspended with respect to the housing by magnetic flux generated by the combination of permanent magnets and electromagnets, and rotated by an electric motor;

wherein the magnetic flux from the permanent magnet and the electromagnet shares a common magnetic path.

2. (Canceled)

3. (Original) A blood pump as defined in 1, wherein the common magnetic path includes at least part of a soft iron structure within the electromagnet.

4. (Original) A blood pump as defined in 1, wherein the common magnetic path includes both radial and axial orientations with respect to an axis of rotation.
5. (Original) A blood pump as defined in 1, wherein the impeller is fully suspended along all axes of rotation.
6. (Original) A blood pump as defined in claim 1, wherein all blood-contacting surfaces are coated with a wear-resistant biocompatible ceramic coating.
7. (Original) A blood pump as defined in claim 6, wherein the ceramic coating is formed of a transition metal nitride.
8. (Original) A blood pump as defined in claim 6, wherein the coating is formed of a material selected from the group consisting of titanium nitride, silicon nitride, titanium carbide, tungsten carbide, silicon carbide, and aluminum oxide.
9. (Original) A blood pump as defined in claim 6, wherein the ceramic coating is amorphous and conductive.

10. (Original) A blood pump as defined in claim 1 which is configured for implantation in a human patient.

11. (Original) A blood pump as defined in claim 10, wherein all tissue contacting surfaces are coated with a wear-resistant biocompatible ceramic coating.

12. (Previously Presented) A blood pump as defined in claim 1, wherein the electromagnetic bearing defines a common magnetic path for flux generated by both permanent and electromagnet sources, said electromagnetic bearing including a first radial component and first axial component attached to the first radial component which collectively define at least a portion of the common magnetic path.

13. (Currently Amended) A blood pump as defined in claim 12, further comprising a second axial component coupled at a lower distal end of the first radial component, the combination defining at least a portion of the common magnetic path.

14. (Original) A blood pump as defined in claim 12, further comprising a second radial component coupled at a distal end of the first axial component, the combination defining at least a portion of the common magnetic path.

15- 28. (canceled)